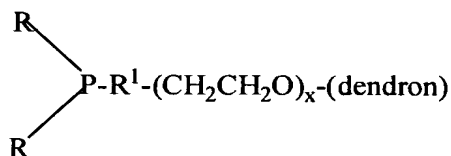


Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

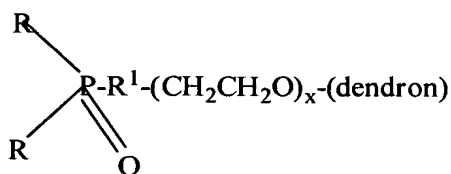
1. (withdrawn-currently amended) A method of stabilizing semiconductor, metal, and metal salt nanoparticles, the method comprising contacting organic dendrons containing single focal point phosphine groups, in combination with ethylene oxide units, of the general formula:



wherein x has a value of from 1 to 10, each R is independently selected from alkyl groups of 1 to 4 carbon atoms and aryl groups and R¹ is a connector group;

with colloidal solutions of semiconductor, metal, and metal salt nanoparticles and without quenching the photoluminescence while allowing the single focal point phosphine groups to react with the surfaces of the semiconductor, metal, and metal salt nanoparticles to obtain stabilized, dendronized, semiconductor, metal, and metal salt nanoparticles.

2. (withdrawn – currently amended) A method of stabilizing nanoparticles selected from the group consisting of semiconductor, metal, and metal salt nanoparticles, the method comprising contacting organic dendrons containing single focal point phosphine oxide groups, of the general formula:

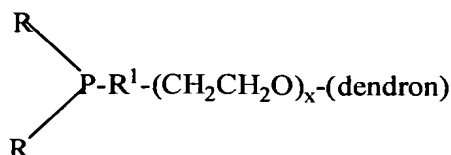


wherein x has a value of from 1 to 10, each R is independently selected from alkyl groups of 1-4 carbon atoms and aryl groups and R¹ is a connector group;

with colloidal solutions of semiconductor, metal, and metal salt nanoparticles and without quenching the photoluminescence while allowing the single focal point phosphine oxide groups to react with the surfaces of the semiconductor, metal, and metal salt nanoparticles to obtain stabilized, dendronized, semiconductor, metal, and metal salt nanoparticles.

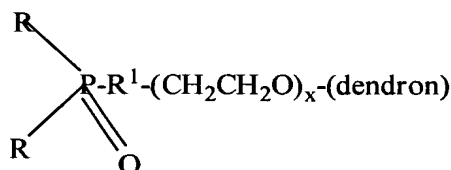
3. (withdrawn— currently amended) [[A]] The method according to claim 1 wherein the semiconductor, metal, and metal salt nanoparticles are passivated prior to contacting them with the single focal point functional groups.
4. (withdrawn— currently amended) [[A]] The method according to claim 2 wherein the semiconductor, metal, and metal salt nanoparticles are passivated prior to contacting them with the single focal point functional groups.
5. (withdrawn— currently amended) [[A]] The method according to claim 1 wherein the outside surfaces of the dendrons contain functional groups.
6. (withdrawn— currently amended) [[A]] The method according to claim 2 wherein the outside surfaces of the dendrons contain functional groups.

7. (withdrawn— currently amended) [[A]] The method as claimed in claim 5 wherein the functional groups on the outside surfaces of the dendrons are selected from the group consisting of: (i) hydrophilic groups, (ii) hydrophobic groups, (iii) reactive groups, and (iv) passive groups.
8. (withdrawn— currently amended) [[A]] The method as claimed in claim 6 wherein the functional groups on the outside surfaces of the dendrons are selected from the group consisting of: (i) hydrophilic groups, (ii) hydrophobic groups, (iii) reactive groups, and (iv) passive groups.
9. (withdrawn— currently amended) [[A]] The method as claimed in claim 7 wherein the reactive groups are selected from the group consisting of: hydroxyl, amino, carboxylic, sulfonic, sulfonato, mercapto, amido, phosphino, -NH-COPh, -COONa, alkyl, aryl, ester, heterocyclic, alkynyl, and alkenyl.
10. (canceled)
11. (canceled)
12. (currently amended) A composition of matter, said composition of matter being colloidal solutions selected from the group consisting of semiconductor nanoparticles, metal nanoparticles, and metal salt nanoparticles having outside surfaces, said outside surfaces having attached thereto, dendrons, said attachment comprising a linking group selected from [[:]] phosphorous; wherein the phosphorous, in combination with ethylene oxide units, is in the form of a group selected from:
 - a. phosphines of the general formula:



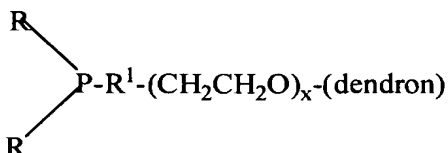
wherein x has a value of from 1 to 10, each R is independently selected from alkyl groups of 1 to 4 carbon atoms and aryl groups and R¹ is a connector group; and

- b. phosphine oxides in combination with ethylene oxide units. of the general formula:



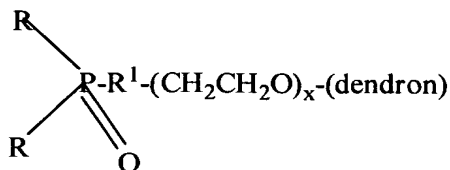
wherein x has a value of from 1 to 10, each R is independently selected from alkyl groups of 1-4 carbon atoms and aryl groups and R¹ is a connector group; and
without quenching the photoluminescence.

13. (currently amended) [[A]] The composition of matter as claimed in claim 12 wherein (a) in combination with ethylene oxide has the general formula:



wherein x has a value of from 1 to 10, each R is independently selected from alkyl groups of 1 to 4 carbon atoms and aryl groups and R¹ is a connector group.

14. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein (b) in combination with ethylene oxide has the general formula:



wherein x has a value of from 1 to 10, each R is independently selected from alkyl groups of 1-4 carbon atoms and aryl groups and R¹ is a connector group.

15. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is iron.
16. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is gold.
17. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is copper.
18. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is platinum.
19. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is palladium.
20. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is cobalt.

21. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is nickel.
22. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is zinc.
23. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is cadmium.
24. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is iron oxide.
25. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdSe.
26. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdS.
27. (currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdSe/CdS.
28. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdSe/ZnS.
29. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdTe.
30. (withdrawn— currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdTe/CdS.

31. (withdrawn – currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the nanoparticle core is CdTe/ZnS.
32. (currently amended) [[A]] The composition of matter as claimed in claim 12 wherein the composition contains a drug, pharmaceutical or fragrance.
33. (withdrawn) The use of the composition of matter of claim 15 as an MRI agent.
34. (withdrawn) The use of the composition of matter of claim 16 as a projectile for a gene gun.
35. (withdrawn) The use of the composition of claim 12 to carry a drug, pharmaceutical or fragrance.
36. (withdrawn) The use of a composition of matter of claim 12 wherein the use is selected from the group consisting of: biologically active materials, genetic materials, biologically active materials for use as vaccines, biomedical tags, components in light emitting diode devices, diagnostics, nanosensors, nano-arrays for DNA and RNA, protein applications, chelators, photon absorption, energy absorbing, energy emitting, signal generator for diagnostics, and radioactive materials.
37. (new) The composition of matter as claimed in claim 13 wherein the nanoparticle core is CdSe/CdS.
38. (new) The composition of matter as claimed in claim 13 wherein each R is phenyl.
39. (new) The composition of matter as claimed in claim 38 wherein R¹ is benzoic acid as a connector and x is 2.